MONTHLY WEATHER MAP

METEOROLOGICAL SERVICE

DOMINION OF CANADA

DECEMBER 1931

TEMPERATURE

Except for a very small part of British Columbia and the Gaspé peninsula and the north shore of the Gulf of the St. Lawrence in Quebec, this December was warmer than normal over the Dominion.

The excess over normal temperature was ten to twelve degrees over a part of southeastern Saskatchewan and the extreme southern portion of Manitoba. In Alberta the excess varied from one or two degrees in the south and southwest to five or even eight degrees in the Athabasca and Peace river valleys.

In British Columbia the general excess was about two degrees although there was a small deficiency in the southern interior and along the Yukon boundary.

In the Lake of the Woods region and east to Port Arthur as well as north to the Albany river, there was a large excess, amounting to ten or twelve degrees. East of Lake Superior to the Ottawa and St. Lawrence valleys the excess was four to nine degrees. In some parts of Ontario this was the twenty-fourth consecutive month with temperatures above normal. This December was not, however, so warm as that of 1923.

In western Quebec a large area averaged three to seven degrees warmer than normal but in the Gaspé peninsula and the Gulf region the month was slightly cooler than normal.

In the Atlantic Provinces the excess varied from less than one degree in parts of Nova Scotia to four degrees in some interior districts of New Brunswick.

Over the far north excess ranged from two to twelve degrees.

PRECIPITATION

In British Columbia there was an excess over normal precipitation in the Lower Fraser valley and in the Kootenay region, as well as locally on Vancouver Island. Rains were frequent, and on some days quite heavy, on the lower mainland with rivers flooding on the 18th. In the Okanagan valley, although the total precipitation was generally less than normal, there was a considerable amount of snow. In the Kootenays the snowfall was generally heavy. In the northern interior and on the north coast precipitation was somewhat lighter than usual.

In Alberta precipitation was generally in excess of normal. In December the normal amount in Alberta outside the higher valleys, varies from less than half to about three quarters of an inch. This December the amount on the plains ranged from half an inch to two inches. In the mountain valleys some places reported three to four inches. At the close of the month there was six inches of snow lying on the ground in southeastern Alberta.

In Saskatchewan, over the cultivated areas, the normal precipitation in December varies from four-tenths to about eight-tenths of an inch. This December from one inch to one inch and a half was reported from a considerable area. In the extreme southeast, and locally to the east of the Cypress Hills, several points reported less than four-tenths of an inch. From one to eight inches of snow lay upon the ground at the close of the month.

In Manitoba, where the normal December precipitation ranges from one-half to one inch, most points reported less than half an inch and some points less than one-tenth.

In the Rainy River region, and immediately north of Lake Huron from Manitoulin Island to White River and east to Lake Temiskaming, less than one-half the usual amount was recorded. In the northern portion of the Lake of the Woods region and in the Abitibi region precipitation was nearly normal. In southern Ontario there were excesses in some of the central counties but rather generally there was a small deficiency.

In Quebec south of the middle St. Lawrence, precipitation was nearly normal with local excess. North of the River, and especially in the Lake St. John region, precipitation was rather light.

In central and northern New Brunswick, Prince Edward Island and Cape Breton there were small to moderate excesses. In southern Nova Scotia and on the north shore of the Bay of Fundy there was a moderate deficiency. The latter part of the month was marked by stormy winds and gales in the Atlantic provinces.

A. J. CONNOR

SPECIAL REPORTS

NOTE—Column H is Highest Temperature; Column L is Lowest Temperature; Column P is Precipitation in inches; Column I denotes total of bright sunshine in hours during the month; Column Sg denotes depth of snow on ground in inches; where given.

BRITISH COLUMBIA

STATION	H	L	P	I	STATION	H	L	P	I	STATION	H	L	P	I
Victoria	..	..	2.6	60	White Rock	54°	28°	6.9		Kaslo	44°	11°	4.8	
Sidney	..	..	5.4		Vancouver	..	..	11.9	23	Cranbrook	45°	-8°	1.7	
Sooke	52°	26°	5.7		Salmon Arm	46°	1°	2.8	18	Golden	44°	-18°	2.5	
Port Alberni	46°	26°	13.5		Vernon	44°	1°	1.5		Glacier	35°	-5°	5.4	
Duncan	49°	23°	4.3		Kamloops	..	..	1.0		Prince George	..	..	1.3	37
Nanaimo	50°	26°	7.8	28	Penticton	46°	8°	0.8		Prince Rupert	..	..	11.2	15
Chemainus	..	..	10.5		Oliver	46°	-4°	1.6	21	Estevan Point	..	..	13.5	
New Westminster	52°	27°	10.7		Princeton	40°	-10°	0.6						

ALBERTA

STATION	H	L	P	I	Sg	STATION	H	L	P	I	Sg
Peace River						*Southern*					
Beaver Lodge	40°	-16°	0.7	47		Calgary	46°	-8°	1.5	77	
Fairview			0.1	37	8	Medicine Hat			2.0	90	6
Grouard			0.8			Craigmyle			0.6		
High Prairie			0.3			Raymond			1.1		
						Macleod			0.5		
Northern						Jenner			1.2		
Edmonton			1.5			Harmattan			1.0		
Wabamun			2.0			High River			1.8		
Coronation			0.7			Claresholm			1.0		
Ranfurly			1.0			Lyndon			0.9		
Wetaskiwin			1.0			Winnifred			0.6		
Hillsdown			0.8			Seven Persons			1.9		
Perbeck			0.8			Lethbridge			0.7		
Telfordville			1.0			*Mountain Valleys*					
Viking			1.4			Exshaw			1.1		
Rumsey			1.1			Lake Louise			3.4		
Calmar			0.8			Entrance			0.5		
Roycroft			0.8			Rocky Mountain House			3.9		
						Coleman			1.3		

SASKATCHEWAN

Northern and Eastern						Regina			0.5		
						Grenfell			0.3		
Battleford			0.9		8	Francis			0.2		
Prince Albert			1.3		8	Ceylon			0.6		
Prongua			1.0			Chaplin			0.6		4
Quill Lake			0.4		3	Strongfield			0.9		
Saskatoon			0.8		8	Midale			0.4		
Whitewood			0 3		1	Ft. Qu'Appelle			0.4		
Nipawin			0.9			Beechy			1.0		
Kamsack			0.1			Pennant			1.3		
St. Walburg			1 4			Dundurn			0.9		
Maskakee Springs			1.1			Cadillac			0.5		3
Muenster			1.0		3	Davidson			1.1		
Waseca			0.8		8	Gravelbourg			1.7		
Lintlaw			1.1			Wapashoe			1.1		
Tugaske			1.4		3	Klintonel			0.8		
Lestock			0.9			Maple Creek			0.7		
Carlyle			0.4			Hubbard			0.6		
Semans			0.4			Yellow Grass			0.9		
Nokomis			1.0		6	Lumsden			0.7		
Turtleford			1.6		22	Govenlock			0.1		
Lac la Ronge			1.1			Rosetown			1.4		
Scott			1.0		4	Leader			1.2		7
Southern and Central						Strasbourg			1.1		
						Caron			1.0		
Swift Current			1.3	98	5	Gull Lake			1.0		
Moose Jaw	45°	-9°	0.5	67	1	Leitchville			1.5		
Qu'Appelle			0.5	61	0	Outlook			0.8		
Indian Head			0.4			Cypress Hills			0.9		8
						Nashlyn			0.1		

MANITOBA

Le Pas	37°	-23°	0.5	60		Hamiota	37°	-20°	0.0		
Minnedosa	39°	-18°	0.2		T	Morris	37°	-15°	0.1		T
Winnipeg	..	..	0.1	80	2	Dauphin	4 °	-13°	0.5		
Treherne	38°	-9°	0.1		4	Warren	37°	-20°	0.2		
Morden	43°	-14°	0.3	89		Waskada	42°	-13°	0.1		
Russell	36°	-20°	...			Great Falls	40°	-18°	...		
Brandon	37°	-19°	...	72	T	Sprague	40°	-21°	0.5		
St. Albans (Treesbank)	38°	-20°	0.2		2	Pinawa	39°	-17°	0.4		

ONTARIO

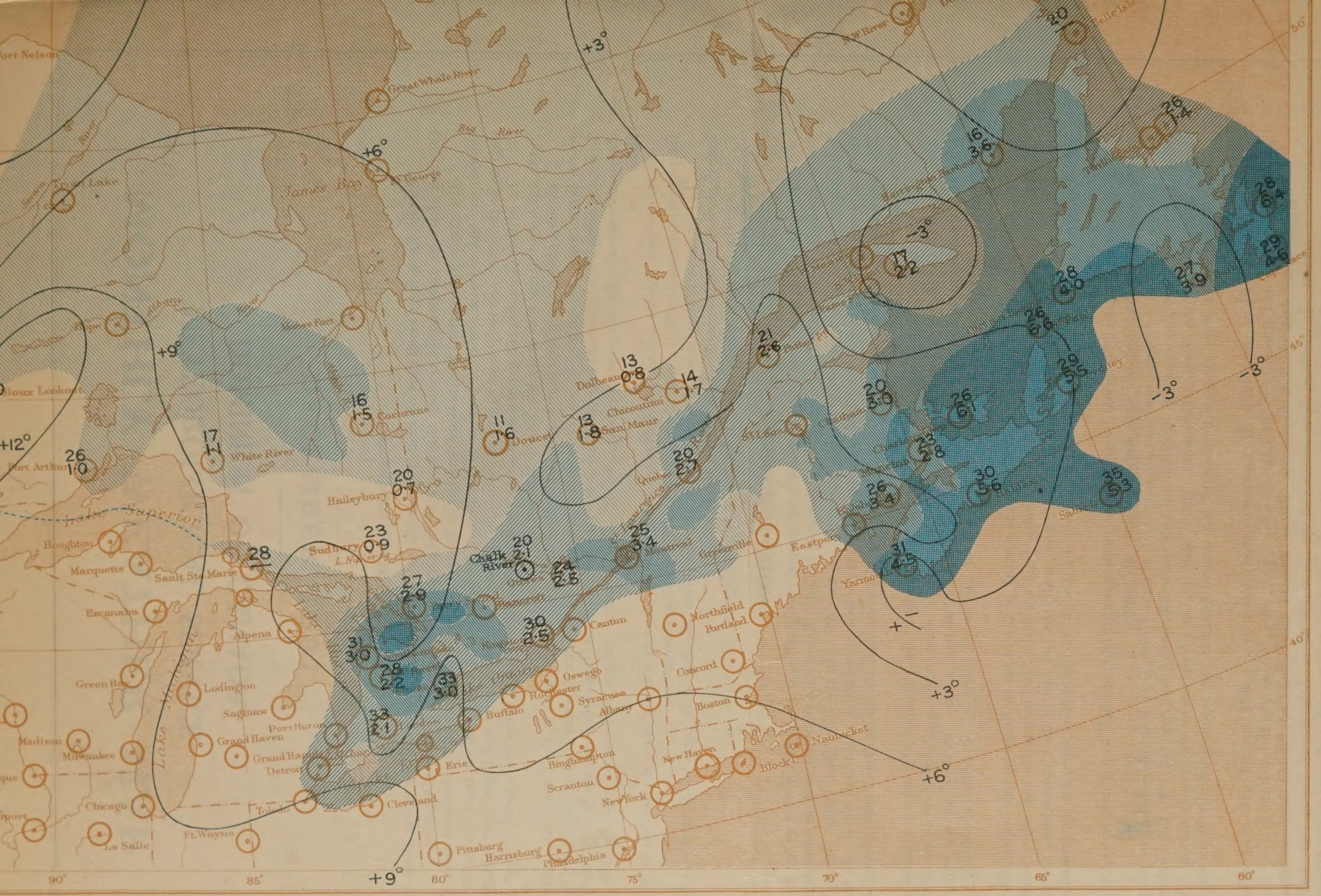
STATION	H	L	P	I	Sg	STATION	H	L	P	I	Sg
Atikokan	41°	-14°	0.4			Barrie	46°	-2°	3.6		T
Mine Centre	38°	-16°	0.4		4	Walkerton	49°	6°	3.2		
Ignace	38°	-20°	0.9			Mount Forest	45°	-17°	2.2		1
Kenora	36°	-14°	1.2			Brucefield	53°	15°	2.9		0
Sioux Lookout	36°	-14°	1.0		8	Stratford	50°	7°	4.1		
Port Arthur	43°	0°	1.0		T	London	53°	17°	2.1		0
Quorn	39°	-18°	0.4		12	Woodstock	52°	2°	3.1	75	
White River	40°	-20°	1.1		3	Paris	49°	5°	3.3		3
Schreiber	40°	-11°	0.6		0	Alton	47°	-2°	4.5		
Chapleau	39°	-11°	0.8			Harrow	59°	21°	1.7	82	0
Ruel	42°	-29°	0.9		0	Simcoe	56°	-7°	2.6		0
Cochrane	38°	-18°	1.5	72	5	Toronto	51°	10°	3.0	76	0
Haileybury	41°	-8°	0.7	54	0	Beeton	55°	-7°	3.4		0
Heaslip	37°	-23°	1.4			Bloomfield	50°	2°	2.5		
Kapuskasing	38°	-26°	2.3	60		Queensboro'	46°	-20°	3.7		0
Algonquin Park	40°	-20°	2.6			Peterboro'	49°	-4°	3.2		0
Madawaska	45°	-23°	2.2			Kingston	48°	4°	2.5	79	0
Montreal River	42°	-16°	0.6			Brockville	49°	0°	2.9		0
Crystal Falls	42°	-13°	0.7			Morrisburg	52°	-6°	2.2		2
Providence Bay	44°	-3°	1.8			Ottawa	49°	-2°	2.5		7
Parry Sound	44°	-2°	2.9		6	Ottawa (Exp.Farm)	46°	-8°	2.3	82	0
Scotia Junction	43°	-15°	3.5		8	Renfrew	40°	-8°	2.4		
Walker's Point	45°	-13°	4.0	96	1	Pembroke	43°	-5°	2.1		2
Beatrice	44°	-16°	2.8		3	Clontarf	45°	-10°	2.6		8

QUEBEC

Cedars	46°	0°	3.3		2	Gaspé	38°	-7°	5.4		
Macdonald College	43°	-4°	2.9		3	Roberval	44°	-8°	1.8		4
Montréal	46°	-1°	3.4	69	1	Albanel	39°	-11°	0.7	72	4
Farnham	47°	-10°	2.5	69	2	Manouan	38°	-18°	2.4		
Brome	44°	-14°	3.2			Lake Kempt	38°	-24°	2.8		
Nicolet	37°	5°	2.1		6	La Tuque	39°	-16°	1.3		
Sorel	38°	-3°	1.9		4	Chute à Murdock	45°	-18°	1.4		
Lennoxville	47°	-10°	2.8	68	2	Huberdeau	43°	-7°	2.0		1
Sherbrooke	45°	-4°	2.9	60	2	St. Lin					
Drummondville	44°	-3°	3.3		2	des Laurentides	44°	-6°	1.2		2
Beauceville	44°	-14°	1.9		6	Maniwaki	42°	-10°	2.7		8
Lake Mégantic	43°	-5°	1.1		7	St. Gabriel de					
Cap Rouge	44°	-4°	2.7	62	7	Brandon	36°	-10°	1.7		5
Québec	41°	-2°	2.7	69	4	La Ferme	36°	-19°	1.2	45	
St. Joachim	39°	-1°	2.0			Ville Marie	44°	-4°	1.1		0
Seven Falls	45°	-17°	3.5			Temiskaming	42°	-1°	1.2		
Ste. Anne de la						Sanmaur			1.8		7
Pocatiére	40°	-3°	0.6	56		Abitibi	36°	-17°	0.8		3
La Malbaie	43°	-9°	2.3								

ATLANTIC PROVINCES

Saint John	50°	2°	3.4	101	1	Sussex	47°	-10°	4.0		4
Aroostook	41°	-14°	3.0		7	Woodstock	47°	-14°	3.0		16
Bathurst	40°	-7°	3.5		33	Halifax	..	..	5.6	..	T
Chatham	44°	-11°	3.0		14	Kentville	50°	7°	6.1	48	T
Fredericton	45°	-14°	2.8	87	5	Liverpool	55°	3°	4.3		
Fredericton (Experimental Farm)	44°	-13°	2.7	86	3	Nappan	47°	-2°	4.7	62	
						Sydney	45°	15°	5.5		T
Gagetown	47°	-8°	3.1		8	Truro	48°	3°	3.7		
Grand Falls	48°	-22°	2.5		12	Upper Stewiacke	50°	0°	4.4		6
Harvey	46°	-13°	2.3		8	Wolfville	51°	8°	3.8	55	3
Moncton	46°	-5°	2.8			Yarmouth	51°	15°	4.5		1
Musquash	50°	-2°	3.9		0	Charlottetown	45°	4°	5.2		14
McAdam	45°	-7°	3.5		3	Charlottetown (Experimental Farm)			6.1	47	
Rexton	44°	-10°	4.6		6						


Port Nelson
Great Whale River
Moose Factory
Timmins
Dolbeau
Chicoutimi
Ste Maur
Quebec
Sherbrooke
Lac Megantic
Eastpor
Yarmouth
Sault Ste Marie
Houghton
Marquette
Escanaba
Alpena
Green Bay
Ludington
Saginaw
Port Huron
Grand Haven
Detroit
Madison
Milwaukee
Chicago
La Salle
Ft. Wayne
Toledo
Cleveland
Erie
Buffalo
Rochester
Oswego
Syracuse
Albany
Binghampton
Scranton
New York
Pittsburg
Harrisburg
Philadelphia
New Haven
Block I.
Nantucket
Boston
Concord
Portland
Northfield
Canton
Lake Superior
Lake Michigan
Lake Huron
Lake Erie
Lake Ontario
+12°
+9°
+6°
+3°
-3°
90°
85°
80°
75°
70°
65°
60°
50°
45°
40°

E, DOMINION OF CANADA.
R MAP
R, 1931
rom normal mean temperature; also total precipitation
nonth.
Ellesmere Island
Ponds Inlet
Godhaven
Angmagssalik
Pangnirtung
Godthaab
Resolution
Fort Burwell
Cape Wolstenholme
Wakeham Bay
Port Chimo
+12°
+9°
+6°
+3°
+ —
— 10
1·8
1·8
0·3
0·1
17
19
21
90°
85°
80°
75°
70°
65°
60°
55°
50°
45°
40°
35°
60°
55°

REFERENCES.
The upper Figures give the mean Temperature.
The lower Figures give the precipitation in inches.
The Black lines shew the difference from the normal mean Temperature.
The shading shews approximately the precipitation of the month.
Less than 1 inch
Less than 2 inches
Less than 3 inches
Less than 4 inches
More than 4 inches
+3°
+6°
+9°
Seattle
Tacoma
Portland
North Yakima
Walla Walla
Lewiston
Spokane
Wallace
Kalispell
Missoula
Helena
Butte
Billings
Miles City
Williston
Devils Lake
Bismarck
Moorhead
Ellendale
Rapid City
Pierre
Huron
Sioux City
Valentine
Sheridan
Lander
Pocatello
Salt Lake City
Cheyenne
North Platte
Omaha
Saskatoon
Swift Current
Medicine Hat
Calgary
Edmonton
Prince George
Grouard
Athabasca Landing
Peace River
Fort St. John
Dawson Creek
Fort Nelson
Fort Simpson
Fort Resolution
Fort Chipewyan
Lac la Ronge
Prince Albert
Battleford
The Pas
Norway House
Pikwitonei
Winnipeg
Qu'Appelle
Minnedosa
Moose Jaw
Duluth
St. Paul
Charles City
120°
115°
110°
105°
100°
95°
50°
45°
40°

METEOROLOGICAL SERV
WEATHE
DECE
Chart shewing the mean temperature and the differe
of t
+3°
+3°
+3°
+6°
+9°
+12°
−9
−1.1
Tanana
Fort Yukon
Herschell I.
−4
−0.3
Aklavik
−3
−0.1
Eagle
McPherson
−9
−0.5
Dawson
Yukon
River
−9
−2.1
Good Hope
−4
−0.4
Cambridge Bay
−1
−0.4
Great Bear Lake
Norman
Mackenzie River
Coppermine
Coppermine R.
−2
−0.9
Athabasca
2.6
2.9
33
57
38
1.2
Sitka
Simpson
Liard
River
−2
−0.2
Great Slave Lake
Hay River
−2
−0.6
Fort Smith
Height of
Land
River
Peace
Athabaska L.
Chipewyan
Fairvi
150°
145°
140°
130°
125°
120°
115°
110°
105°
100°
95°
60°
55°

LIBRARY
WEATHER BUREAU